REMARKS/ARGUMENTS

Applicants acknowledge receipt of the Office Action dated July 26, 2004. Claims 1-60 are pending in the application. Please note that claims 1, 17, 36, and 47 are independent claims. Claims 1-46 are allowed. By this Response, claims 47, 56, and 58 are amended. The Examiner has not considered the documents submitted with the application because of the submittal's failure to comply with 37 CFR 1.98(a)(1). The Examiner has also rejected claims 58-60 under 35 U.S.C. § 112 as based on a disclosure that is not enabling. In addition, the Examiner has rejected claims 56-60 under 35 U.S.C. § 112 as being indefinite. Moreover, the Examiner has rejected claims 47-55 under:35 U.S.C. § 103(a) as being unpatentable over Cooper et al., U.S. Patent No. 5,317,156 (Cooper) and further in view of Mori et al., U.S. Patent No. 6,455,852 (Mori). Applicants believe that all pending claims are allowable over the art of record and respectfully request reconsideration and allowance of all claims.

I. The submitted documents are submitted with an information disclosure statement.

The Examiner states that "[t]he information disclosure statement filed 03/01/2004" does not comply with 37 CFR 1.98(a)(1) because "the documents were present but no IDS list was supplied." (Office Action, page 2, section 1) Applicants respectfully note to the Examiner that the documents submitted were not submitted as an information disclosure statement but instead were submitted as exhibits attached to the Affidavit of Christopher Jones. To comply with the Examiner's objection, the Applicants submit with this Response an information disclosure statement for such documents complying with 37 CFR 1.98(a)(1). Therefore, Applicants respectfully request the Examiner to consider the documents.

II. Claims 58-60 are based on an enabling disclosure.

The Examiner has rejected claims 58-60 under "35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling." (Office Action, page 2, section 3) In rejecting claim 58, the Examiner states that "[c]laim 58 recites that the microprocessor needs only the first and second upstream signals to calculate the parameter claimed in claim 47, however, using only the upstream signals will not allow such a determination since the upstream signals are the signals that don't even go through the sample and reference fluids, at most they measure the light beam that comes from the light source." (Office Action, pages 2-3, section 3) Applicants have amended claim 58 to recite that the microprocessor "uses said first and second upstream signals with said first and second downstream signals in calculating said parameter." Applicants respectfully submit that claim 58 does not require the microprocessor to need only the first and second upstream signals to calculate the parameter of claim 47.

In rejecting claim 58, the Examiner further states that "the use of only the upstream third signal does not enable for the determination of the degree the fluid needs to be diluted at, since the signal does not enter the dilution cell at all, thus it does not give any indication of the sample concentration in the cell." (Office Action, page 3, section 3) Applicants have further amended claim 58 to recite that the "microprocessor uses said third upstream signal and said third downstream signal in determining whether and to what degree to dilute the fluid with the diluent." Applicants respectfully submit that claim 58 does not require the use of only the third upstream signal for a determination of the degree the fluid needs to be diluted but instead requires "said third upstream signal and said third downstream signal in determining whether and to what degree to dilute the fluid with the diluent."

Claims 59 and 60 are dependent upon claim 47. Claim 47 has been amended to recite "a diluent." Applicants note that the Examiner did not state the specific reasons for the § 112 rejections of claims 59 and 60. The Applicants respectfully submit that claims 59 and 60 are based on a disclosure that is enabling.

Therefore, Applicants respectfully request the Examiner to remove the § 112, first paragraph, rejections of claims 58, 59, and 60 and allow such claims.

III. Claims 56-60 are not indefinite.

The Examiner has rejected claims 56-60 under 35 U.S.C. § 112, second paragraph, "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." (Office Action, page, 3, section 5) The Examiner rejected claim 56 because it "recites the limitation 'said third beam portion' in line 2. (Office Action, page 3, section 6) There is insufficient antecedent basis for this limitation in the claim." The Applicants amend claim 56 to recite "the pre-dilution cell containing the portion of the fluid positioned so that at least a third portion of a laser beam passes through the portion of the fluid." Applicants respectfully submit that claim 56, as amended, satisfies § 112.

Applicants note that the Examiner did not state the specific reasons for the § 112, second paragraph, rejection of claim 57. Applicants respectfully submit that claim 57 satisfies § 112.

The Examiner rejected claim 58 because it "recites the limitation 'the diluent' in line 4. There is insufficient antecedent basis for this limitation in the claim." Claim 47 has been amended to recite "a diluent." Claim 58 is dependent upon claim 47. Applicants therefore respectfully submit that claim 58 satisfies § 112.

The Examiner rejected claim 59 because it "recites the limitation 'the diluent' in line 1.

There is insufficient antecedent basis for this limitation in the claim." Claim 47 has been

amended to recite "a diluent." Claim 59 is dependent upon claim 47. Applicants therefore respectfully submit that claim 59 satisfies § 112.

The Examiner rejected claim 60 because it "recites the limitation 'the diluent' in line 1. There is insufficient antecedent basis for this limitation in the claim." Claim 47 has been amended to recite "a diluent." Claim 60 is dependent upon claim 47. Applicants therefore respectfully submit that claim 60 satisfies § 112.

IV. Claims 47-55 are patentable over *Cooper* and *Mori*.

Applicants respectfully traverse the Examiner's rejections of claims 47-55 under § 103 as being allegedly unpatentable over *Cooper* in view of *Mori*. Applicants submit that, contrary to MPEP section 2143, the Examiner has failed to make a *prima facie* case of obviousness in rejecting such claims in that the Examiner has failed to cite references that teach or suggest all of the elements recited in the rejected claims.

Claim 47 is an independent claim upon which claims 48-55 depend. Claim 47 requires "a pre-dilution cell containing a portion of the fluid positioned upstream of the first volume" and "wherein the portion of the fluid positioned upstream of the first volume contained in the pre-dilution cell provides information that can be used by the microprocessor to determine whether and to what degree to dilute the fluid with a diluent." Nothing in *Cooper* teaches or suggests a pre-dilution cell or wherein the portion of the fluid positioned upstream of the first volume contained in the pre-dilution cell provides information that can be used by the microprocessor to determine whether and to what degree to dilute the fluid with a diluent. Applicants note that the Examiner in the Office Action states that "[r]egarding claim 47 *Cooper* fails to disclose a pre-dilution cell." (Office Action, page 6, section 12, emphasis added)

Mori cannot supply Cooper with the missing limitations. Mori relates to determining and correcting the concentration ratio of a component gas. (Mori, Abstract) The Examiner states that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a pre-dilution cell in the Cooper device . . . since the Applicant has not disclosed that the presence of this pre-dilution cell solves any stated problems or is for any particular purpose" (Office Action, page 6, section 12, emphasis added) As noted above, claim 47 has been amended to recite "wherein the portion of the fluid positioned upstream of the first volume contained in the pre-dilution cell provides information that can be used by the microprocessor to determine whether and to what degree to dilute the fluid with a diluent."

Nothing in Mori teaches or suggests that a portion of the fluid positioned upstream of the first volume contained in the pre-dilution cell provides information that can be used by the microprocessor to determine whether and to what degree to dilute the fluid with a diluent.

Applicants therefore respectfully submit that the Examiner has failed to articulate a *prima* facie case of obviousness in rejecting claims 47-55, because, contrary to MPEP section 2143, the Examiner has failed to cite references that teach or suggest all of the elements recited in the rejected claims. Since independent claim 47 is submitted to be allowable, dependent claims 48-55 must a fortiori also be allowable, since they carry with them all the limitations of independent claim 47.

V. Conclusion

Applicants believe that in view of the foregoing remarks, all claims are allowable and that the present application is now in full condition for allowance, which action Applicants earnestly solicit. If the Examiner has any questions or comments regarding the foregoing, the Examiner is requested to telephone the undersigned.

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art which have yet to be raised, but which may be raised in the future.

If any fees are inadvertently omitted or if any additional fees are required or have been overpaid, please appropriately charge or credit those fees to Conley Rose, P.C. Deposit Account Number 03-2769.

Respectfully submitted,

Tod T. Tumey

PTO Reg. No. 47,146

CONLEY ROSE, P.C.

P.O. Box 3267

Houston, TX 77253-3267

(713) 238-8000 (Phone)

(713) 238-8008 (Fax)

ATTORNEY FOR APPLICANTS